To: Distribution

From: J. Falksen

Date: 10/19/78

Subject: Version 2 exec_com if-then-else-fi

I like the idea of the version 2 exec_com as specified in
MTB-392. It looks like a good way to make an incompatible syntax
change. I feel, however, that while a change is being made, the
spectre of flow-of-control should be attacked. If not, then it
seems as though a version 3 would become necessary.

First of all, I think that the if construct should look like
this:

```
            &if [...]              &if [...]
            &then {line}           &then  {line}
            {line} ...             {line} ...
            &else {line}           &fi
            {line} ...
            &fi
```

It is very easy for convert_ec to change the existing &if's into
this form. This form requires no &do-&end for its functioning.
(I think PL/I made a mistake in its if contstruct.)

The issue of branching into an &if is easily explained. After
having branched somewhere, if an &fi is encountered then there is
no action to take. If an &else is encountered, then everything
is skipped until the matching &fi is reached.

I have a macro processor which uses this type of conditional
testing. I and others who have used it have found this form to
be quite nice. Nesting is no problem.

Second, the need for a &do-&end is of use only if it is an
iteration construct. I think this would probably be nice, but I
am not attacking that problem since it represents no incompatable
changes.